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ABSTRACT

This investigation employed an in-basket simulation to assess the effect of provisional analysis on the use of evaluation data by program administrators in making program decisions. Sixty-five volunteers from graduate education courses and 52 volunteers from undergraduate educational psychology classes at Western Kentucky University were randomly assigned to two groups, only one of which experienced provisional analysis. Both groups then took part in an in-basket simulation where each person assumed the role of a newly appointed high school principal, receiving a letter from his or her superintendent that directed him or her to dismiss four of seven teachers due to declining enrollment. Analysis of the participants' decisions reflected no differences between those who had experienced provisional analysis and those who had not. The implication is that provisional analysis, as administered, does not affect the use of evaluation data in programmatic decision making by program administrators. Suggestions for future research are discussed. (Author/TE)

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Provisional Analysis as a Means to Improve the Use of Program Evaluation Data: An Investigation[1] of its Effectiveness Using an In-basket Simulation

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Abstract

Evaluation data are usually collected with the intention of being used by program administrators. The present investigation employed an in-basket simulation to assess the impact of provisional analysis on the use of evaluation data by program administrators in making program decisions. Sixty-five volunteers from graduate education courses and 52 volunteers from undergraduate educational psychology classes at Western Kentucky University were randomly assigned to either a group which experienced provisional analysis or one which did not. Both groups then took part in an in-basket simulation where each individual assumed the role of a newly appointed high school principal. In their in-basket, they received a letter from their superintendent who directed them to dismiss four of seven teachers due to a decline in enrollment. The analysis of the participants' decisions reflected no differences between the responses of those individuals who had experienced provisional analysis and those who had not. The implication is that provisional analysis, as administered, does not affect the use of evaluation data in programmatic decision making by program administrators. Suggestions for future research are discussed.

Provisional Analysis as a Means to Improve the Use of Program Evaluation Data: An Investigation of its Effectiveness Using an In-basket Simulation

Program evaluation may be defined as the systematic collection of information about the activities and outcomes of programs in order to assess the extent to which programs meet stated objectives and to determine necessary modifications, if any. The reason for conducting a program evaluation is to provide data-based feedback for use by program officials in making program decisions.

Traditionally, a program evaluator has been an individual outside the program organization who has been asked to evaluate a program. The evaluator has usually been charged with the responsibility of collecting the necessary evaluation data, interpreting those data in relation to program effectiveness and efficiency, making program recommendations, and writing an evaluation report. In most instances, the written report signifies the conclusion of the evaluation.

The result of most program evaluations is that the evaluator's recommendations are provided to the program administrators who in turn make little or no use of the evaluation data or recommendations in making programmatic

decisions (Patton, 1978). Thus, the most difficult challenge facing program evaluators is not deciding what data to collect or how to collect them or which data analyses are most appropriate. Rather, the primary problem is how to construct an evaluation system that will provide program officials with evaluation data and recommendations in a form that will be useful in making program decisions.

Factors Affecting the Use of Program Evaluation Data

Values. Non-use of evaluation data in making programmatic decisions has several possible causes and one of the most important is the value system operating within the organization (Wortman, 1975). Usually, the values of an active organization are a reflection of the values held by the organization's chief decision maker (Weiss, 1972).

In studying how individuals reach decisions in a value laden system, Janis and Mann (1977) found that changing previously derived decisions (as these decisions reflect the values of the individual and organization) to be a much more difficult task to accomplish than reaching the decision initially. In relation to program evaluation, it is important to note that evaluation feedback often calls for a change within the program with an associated modification of the value system. If program officials see the new value system as a radical departure from the old, they tend to simply ignore the evaluation data when making

program decisions (Rochleau, 1976). Therefore, the value system of program officials and staff must be identified and understood in order to maximize the use of evaluation data in program decision making (Ein Dor & Segev, 1976; Wortman, 1975).

Perceived Threat. Traditionally, program evaluators are individuals from outside the program organization who are commissioned solely to collect evaluation data, who render "pass/fail" summative decisions based on those data, and who then leave (Patton, 1978; Weiss, 1972, 1975). In that context, program administrators often find it difficult to separate program evaluation from personal evaluation and, therefore, feel threatened when a program evaluation is being conducted. In addition, if an evaluator is an outsider, program administrators tend to feel even more threatened than if the evaluator is an individual from within the organization (Page & Yates, 1974). The perceived threat of evaluation is reflected in the reasons that administrators give when refusing to participate in evaluation efforts (Page & Yates, 1974): inconvenience or lack of time, threat of personal evaluation, harm to clients, triviality of the "problem," and loss of autonomy.

Techniques that Increase the Use of Evaluation Data

Several methods have been suggested to increase the

use of evaluation data by program officials when making program decisions. These procedures detail ways in which to conduct program evaluations and to take into account the perceived threat of an evaluation as well as the values held by program officials (Davis & Salasin, 1975; Patton, 1978; Weiss, 1972). The focus of each is the rapport between the program evaluator and the program administrator. A good working relationship between the two seems to be the key factor in increasing the likelihood that evaluation data will be used by program officials when making program decisions (Maher, 1978; Matuszak, 1978; Weiss, 1972).

Increase Operational Involvement. One method to strengthen rapport is to include program administrators in planning program evaluations (Matuszak, 1978; Patton, 1978; Thompson, 1975; Weiss, 1972). Such operational involvement results in program officials having more ownership in the evaluation process, being more likely to actively support the evaluation effort (Ein Dor & Segev, 1976; Gorry & Goodrich, 1978; Mason & Mitroff, 1976; Nicholas, 1979; Sechrest, 1975), and being less threatened by the evaluation process (Weiss, 1972). In addition, it has been found that when program administrators participate in identifying areas of importance and potential sources of data, the value they attach to evaluation data increases

(Cohen, 1977; Nicholas, 1979; Patton, 1976). The higher the value associated with the evaluation data, the greater the likelihood that program administrators will use the evaluation data in making program decisions (Gorry & Goodrich, 1978; Patton, 1976).

Adopt a Positive Orientation. One way that program evaluators can improve their rapport with program administrators is by adopting a "positive" orientation (Argorwala-Rogers, 1977) through presenting evaluation findings in terms of program alternatives. By focusing on alternative approaches to attain program goals rather than simply rating the program on a pass-fail basis, participation of both program administration and staff in the evaluation effort will be increased and the program staff's feelings of ownership in the evaluation effort will be enhanced (Sechrest, 1975; Suchman, 1972).

Assume an Adoption-Facilitator Role. Havelock and Lindquist (1978) have suggested that the rapport between an evaluator and an administrator will be increased if the evaluator assumes an adoption-facilitator role. They propose that the evaluator should be audience oriented. The evaluator should allow program officials to assess their own needs and possible sources of data for the evaluation. As an adoption-facilitator, the evaluator will be less threatening to program administrators and, thereby,

reduce the threat a needed change may engender. Through this process, the program administrators will gain an increased feeling of ownership of the evaluation data and be more prone to use evaluation data in program decision making.

Provide Punctual Feedback. Punctual feedback of evaluation data increases the administrator/evaluator rapport by assuring that necessary information is made readily available to program decision makers prior to decision making (Janis & Mann, 1977). Obviously, to be valuable to decision makers, evaluation data must be available prior to the time a decision is to be rendered. From the perspective of the program administrator, if evaluation data are not available, the data can not be used and there is no value in conducting an evaluation.

Meta-Evaluation. Meta-evaluation is a process used to establish an "atmosphere" of cooperation prior to the introduction of an evaluation. Specifically, it is a process which assesses "...the extent to which an evaluation is technically adequate, useful in guiding decisions, ethical in dealing with people in organizations, and practical in the use of resources" (Posavac & Carey, 1980, p. 316). To institute meta-evaluation, the program officials and evaluators review the literature (if there is any available) concerning program evaluations completed on

similar programs. Then, the administrators and evaluators explore the possibilities of using these evaluation strategies in analyzing the evaluation procedures to be used. Situational factors and limitations are discussed, considered, and made a part of the overall evaluation plan. Working together in this pre-planning effort, the rapport between evaluators and program administrators will be strengthened (Patton, 1978).

Provisional Analysis. An evaluation system which incorporates the above ideas is provisional analysis. It is an evaluation planning, implementation, analysis, and utilization process based on the cooperative involvement of program administrators and evaluators (Harper & Babigan, 1971). The first step is for the program administrator and the program evaluator to identify possible program decisions. Second, they then determine whether evaluation data are necessary or helpful in rendering each program decision identified. For those where evaluation data are necessary or helpful, possible data sources are identified. Next, "artificial" evaluation data are generated that pertain to each of the identified program decisions. Treating the data as factual, the administrator and evaluator analyze and interpret the "artificial" data and discuss the program decision implications in each instance. The process is repeated several times using different sets

of "artificial" data with different decision outcomes in order to provide an administrator and an evaluator a greater understanding of data sources, analysis procedures and options, data interpretations, and possible decision outcomes. The provisional analysis process is then repeated with the program staff and the program evaluation system is planned, initiated, and operated.

Through the use of provisional analysis, the program administrator (and staff) guides the evaluator as to where appropriate data may be found and which decisions are possible. In addition, the program officials are demonstrating what they believe to be the important aspects of the program and those components about which they wish to receive evaluative information.

The present study was undertaken to examine the effectiveness of provisional analysis in increasing the use of evaluation data in making programmatic decisions.

Method

Participants

The 117 research participants were volunteers from graduate educational leadership classes and undergraduate educational psychology classes at Western Kentucky University.

The individuals enrolled in the educational leadership classes were receiving training leading to the attainment

of supervisory certification and employment as principals. The mean age of this sample was 31.0 years with an average number of years of teaching experience equal to 6.1. The sample consisted of 23 males and 40 females (n=65) with two participants not reporting their sex.

The undergraduate volunteers had a mean age of 19.9 years. There were 10 males and 31 females (n=52) with 11 participants not reporting their sex.

Instruments

An in-basket simulation technique was used. The participants were asked to assume the role of an individual who had been recently promoted to the position of principal at Everyday High School. The simulation consisted of a letter from the participants' school superintendent congratulating the participant upon being promoted to principal at Everyday High School. In the same letter the superintendent asked the person to recommend four of seven teachers at Everyday for dismissal due to sharp declines in student enrollment. Each teacher's personnel file consisting of both personal and objective (i.e., evaluation) data was in the in-basket along with needed forms and materials.

The personnel file contained two pages of information. The first page contained the personal information about the teacher; the second presented the evaluation

credentials. Each teacher was described using a differing blend of personal and evaluation characteristics varying from low to high. The arrangement is summarized in Figure 1. An example of a high evaluation credential for a

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Insert Figure 1 about here

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teacher would be a peer rating of nine on a scale from one to ten with ten being the best rating possible; a low evaluation credential would be a peer rating of three. An example of a characteristic having high personal importance would be being a long time friend of the new principal whereas a characteristic having low personal importance would include such things as a past personal disagreement between the teacher and the new principal.

Procedure

Groups of participants were randomly assigned to either a control or experimental condition and ranged in size from nine to fifteen individuals. The groups were placed in different rooms and were given instructions orally. Two different individuals served as the group leaders and conducted the sessions. They were counterbalanced across the experimental and control conditions. Flip charts were used to aid in giving the instructions to each group.

Participants in the experimental condition experienced provisional analysis. In the provisional analysis, an overview of a hypothetical evaluation and decision making situation that was similar to the simulation the participants later received was conducted. Guided by the group leader, participants in the experimental group focused on the types of decisions they would be making as administrators and the kinds of information available to them. After creating some data and discussing possible decision outcomes, the participants were given the letter from their superintendent.

The participants in the control groups received a general orientation regarding possible problem areas facing the school system in the coming year. For instance, they were told a lack of funding may affect the quality of the food services in the school system. After the general overview of problems was completed, the control group participants were given the letter from the superintendent.

All participants were asked to record their teacher dismissal decisions on the specially designed response sheets provided. The participants indicated which four of the seven teachers they recommended for dismissal, the personal and evaluation data used in making their decision, and the value they attached to each datum used.

Results

For both the graduate and undergraduate samples, chi-square analyses of differences in the extent to which evaluation and personal data were used in reaching dismissal decisions revealed only one significant difference between those who had experienced provisional analysis and those who had not. Specifically, the graduate and undergraduate samples differed in their use of evaluation and personal data for Teacher #7, $^2(3)=10.65$, $p< .05$. The graduate student who had not experienced provisional analysis reported using personal data more often than those who had experienced provisional analysis in making their dismissal decisions, $^2(3)=11.04$, $p< .05$. There was no significant difference between the groups in the undergraduate sample, $^2(3)=3.63$, $p> .05$.

When undergraduate and graduate samples were combined, the provisional analysis and control groups differed regarding the amount of personal and evaluation data used in making dismissal decisions for Teacher #4. The provisional analysis group used a significantly greater amount of evaluation data than the control group, $^2(3)=9.09$, $p< .05$.

An average rating of importance was calculated for the evaluation and personal reasons given for a dismissal decision. A repeated measures analysis of variance

conducted on the average rating revealed that in every instance, there was a main effect regarding the ratings given the personal and evaluation data: the evaluation data were consistently given higher average ratings than the personal data. There was no main effect due to provisional analysis in any of the analyses, and only in one case was there a significant interaction. For the graduate sample, the ratings given by the provisional analysis group were higher for the evaluation data whereas the ratings were higher for the personal data for the control group, $F(1,100)=5.81$, $p< .05$. These findings may be an artifact of the data, however, because almost none (n=7) of the people who experienced provisional analysis reported using (and, therefore, rating) personal data.

Discussion

The participants who experienced provisional analysis were not found to use the evaluation data to a greater degree than those not receiving provisional analysis. Only in the case of Teacher #4 was there a significant difference in how frequently the provisional analysis and the control groups used evaluation and personal data. In that instance, the people in the provisional analysis group tended to use evaluation data more frequently than did those in the control group. A possible reason for this outcome was that there was almost no personal data provided

regarding Teacher #4 and the lack of personal data may have "forced" the greater use of evaluation data by the participants. Only in the case of Teacher #7 did the graduate and undergraduate samples differ in the frequency of their use of evaluation and personal data. The reason for this difference is not clear. It could be a chance difference or it could reflect a different use of the evaluation and personal data by the graduate and undergraduate samples. In all other cases, the two samples were consistently alike in their use of personal and evaluation data.

Participants experiencing provisional analysis did not value evaluation data more highly than participants in the control condition. It was found that the participants in both groups valued evaluation data more highly than personal data. In only the case of Teacher #7 for the graduate sample was there a significant interaction between the value placed upon evaluation and personal data and whether or not the participants had experienced provisional analysis. In this case, as was expected, those participants who had experienced provisional analysis rated evaluation data significantly higher than those who had not. In addition, the people who had not experienced provisional analysis rated the personal data higher than those who did. However, the participants in the graduate

sample who experienced provisional analysis gave very few personal reasons for their dismissal decisions and those that were given received low value ratings. Therefore, the significant interaction may be an artifact of the small number of personal reasons given.

Based on the results, one might imply that provisional analysis is not a practical tool for increasing the use of evaluation data by program administrators in making program decisions. However, before provisional analysis is deemed ineffective, the present study should be replicated incorporating several improvements. First, the amount and "quality" of the personal data used in the present study should be increased and strengthened (e.g., a teacher could be a blood relative of the principal). Second, more time should be allocated to and more attention to detail incorported in the conduct of provisional analysis in order to make the participants more comfortable with the use of evaluation data and to produce a better understanding regarding how evaluation data might be used in program decision making. Third, the procedure should be conducted using other simulation situations and with administrators in non-academic settings to examine the applicability of the procedure to a variety of situations.

We need to test a variety of procedures such as provisional analysis in order to assess their effectiveness

in increasing the use of evaluation data. If the procedures are found not to work, then we need to create and empirically test new evaluation models which emphasize using evaluation based data in making program decisions. There will be little, if any, justification for conducting program evaluations in the future if the usage of evaluation data in program decision making cannot be increased.

Footnotes

[1]This paper is based on the Masters Thesis submitted by Mr. Jeffrey Quade to the Department of Psychology, Western Kentucky University, Bowling Green, KY 42101.

[2]In some cases only one reason was given by a participant. In those instances the "average" was based upon only that one rating. Where no rating was given, the "average" was recorded as a zero.

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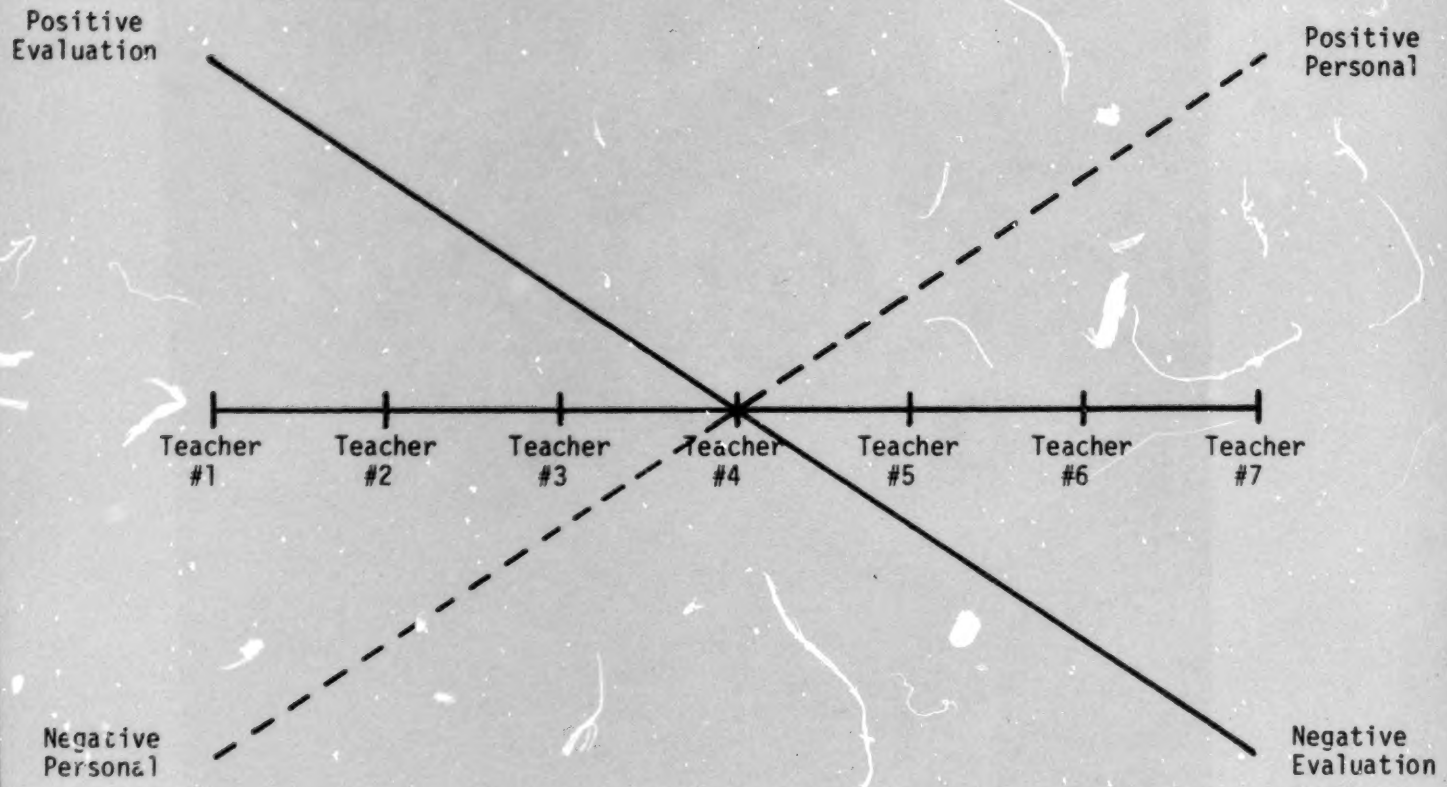

Figure 1. The Relative of Weighting of Positive and Negative Evaluation and Personal Data for Each Teacher